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HEARINGS SECTION

# RAILROAD COMMISSION OF TEXAS OFFICE OF GENERAL COUNSEL

February 11, 2009

RULE 37 CASE No. 0251216 DISTRICT 09

APPLICATION OF CHESAPEAKE OPERATING, INC. FOR AN EXCEPTION TO STATEWIDE RULE 37 TO DRILL WELL NO. 1H ON THE RAMEY UNIT, NEWARK, EAST (BARNETT SHALE) FIELD, TARRANT COUNTY, TEXAS.

#### APPEARANCES:

# FOR APPLICANT CHESAPEAKE OPERATING, INC.:

Philip Whitworth John Hicks Bill Spencer Brandt Vawater Matt Herrin Steve Mills

FOR PROTESTANTS Tommy Khong, on behalf of the 7728 Bermejo Trust, Johnny Lee Nelson, Jr. Sheron Nwachukwu, Freddie Lee Carroll, John Hogan, Lynette Reid, Cynthia Williams, and Suu Lo:

Lon Burnam, State Representative, District 90 Charles Lankford Mark Zuefeldt

## PROPOSAL FOR DECISION

# **PROCEDURAL HISTORY**

APPLICATION FILED:

**NOTICE OF HEARING:** 

**HEARING CONVENED:** 

NOTICE OF REOPENED HEARING SENT:

**RECORD CLOSED:** 

**HEARD BY:** 

March 27, 2008

June 2, 2008

October 17, 2008

December 8, 2008

January 5, 2009

Mark Helmueller - Hearings Examiner Donna Chandler - Technical Examiner

February 11, 2009

PFD CIRCULATION DATE:

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## STATEMENT OF THE CASE

Chesapeake Operating, Inc. ("Applicant" or "Chesapeake") seeks an exception to Statewide Rule 37 for Well No. 1H on the Ramey Unit, Newark, East (Barnett Shale) Field, in Tarrant County. The well has already been drilled. A copy of the as-drilled plat which was submitted into evidence is attached for reference.

The Ramey Unit is an irregularly shaped 196.51 acre pooled unit composed of 291 tracts ranging from 75.48 acres to .14 acres. The southernmost 105.48 acres consists of two tracts where wells can be drilled without obtaining an exception to Statewide Rule 37. The northernmost 91.03 acres of the Ramey Unit include 289 tracts in a residential subdivision within the Fort Worth city limits.

The Ramey 1H was originally permitted as the Green Oaks Well No. 2H by Chesapeake's predecessor, Dale Operating Company. The well was permitted on a 81.7 acre non-pooled unit with a 1661 foot lateral in a general east-west orientation. The permit was issued on June 22, 2006.

On March 21, 2007, Chesapeake filed an application for an amended permit. The well was redesignated as the Ramey 1H at that time. Chesapeake identified a two tract 105.2 acre unit which required an exception to Statewide Rule 37 due to the wellbore's proximity to another unit operated by Chesapeake. The surface location for the well remained the same, but the lateral was changed to run 1839 feet in a north-south orientation. The application was administratively approved on March 28, 2007. Chesapeake filed a second amended permit application for the Ramey 1H on October 24, 2007 to reflect a slight change in the surface location for the well. The second amended permit application was administratively approved on October 31, 2007. A third amended permit application was filed on November 28, 2007 to amend the location of the uppermost perforation point, and further amend the surface location. This permit application was administratively approved on December 7, 2007.

On March 26, 2008, Chesapeake spudded the Ramey 1H well. Surface casing was set on March 27, 2008. Commission records show that drilling operations were completed by April 14, 2008. The well has not been perforated. The lateral was drilled to a total length of 3553 feet instead of the permitted length of 1839 feet. This extended the lateral underneath the residential subdivision.

On March 27, 2008, Chesapeake filed its fourth amended permit application. The primary purpose of this amendment was to permit the lateral which would extend underneath the subdivision located to the immediate north of the two tract 105.2 acre unit previously approved by the Commission. As noted previously, the amended proposed unit is an irregularly shaped 196.51 acre pooled unit composed of 291 tracts. At the time of the hearing, there were 17 unleased "window tracts" within 330 feet of the wellbore and 57 unleased "window tracts" within the boundaries of the Ramey Unit. These tracts cumulatively total 9.11 acres.

Lynette Reid, Johnny Lee Nelson, Jr., Suu Lo, John Hogan, Cynthia Williams, the 7728 Bermejo Trust, Sheron Nwachukwu, and Freddie Lee Carrol ("Protestants") own tracts within 330 feet of the as-drilled lateral for the Ramey 1H.<sup>1</sup> The eight Protestants were collectively represented at the hearing by State Representative Lon Burnam, Charles Lankford, and Mark Zeufeldt. Additionally, Representative Burnam requested standing to participate as the elected representative of residents of the Fort Worth area.<sup>2</sup>

Subsequent to the hearing Chesapeake advised that it had entered into lease agreements with several individuals including protestants Johnny Lee Nelson, Jr., and Sheron Nwachukwu. Leases were also entered into with Terry Balzer, Tom Glaze, Shaerika Moore and Alvin Gray who own tracts more than 330 feet from the Ramey 1-H wellbore. These 6 leases will increase the size of the pooled unit by approximately 1.14 acres.

The Newark, East (Barnett Shale) Field is subject to a spacing requirement of 330 feet minimum distance from the drainhole to the nearest lease line. The as-drilled lateral for the Ramey 1H currently comes within 330 feet of 15 "window tracts" which are not included within the proposed pooled unit. The closest tract is 41 feet from the wellbore. Three other tracts are within 100 feet from the wellbore.

### MATTERS OFFICIALLY NOTICED

The examiners took official notice of the completion papers filed for the Ramey Well subsequent to the hearing on December 9, 2008. These forms include the Commission Form G1, and directional survey showing the as-drilled lateral. These documents confirm that Chesapeake spudded the well on March 26, 2008 and that drilling operations were concluded by April 14, 2008 when the directional survey was performed.

#### APPLICANTS POSITION AND EVIDENCE

Chesapeake contends that it is entitled to an exception to Statewide Rule 37 to prevent confiscation. Chesapeake did not contend that an exception was necessary to prevent waste. Chesapeake asserts that it has a 196.51 acre unit with several hundred individuals who have leased their minerals and want to participate in production of the well from the Newark, East (Barnett Shale) Field. Chesapeake believes that in order to give its leased mineral owners an opportunity to

<sup>&</sup>lt;sup>1</sup>Protests to the application were also filed by Terry Balzer, Tom Glaze, Shaerika Moore, Alvin Gray, Pedro Ayala, and Cecilia Swanson, all of whom own unleased window tracts within the perimeter of the Ramey Unit. These individuals lacked standing as protestants as their properties are all located more than 330 feet from the Ramey 1H wellbore and they therefore are not affected parties under Statewide Rule 37.

<sup>&</sup>lt;sup>2</sup>While providing some evidence showing that the Ramey 1H is not located in Representative Burnham's district, Chesapeake did not object to Representative Burnham's request to participate in the hearing. Additionally, Representative Burnham was asked by several protestants to represent their interests at the hearing. Accordingly, no ruling is necessary with respect to the request for standing.

recover their fair share of reserves that it must be allowed to drill laterals which will cross into the northern part of the unit. In addition to the Ramey 1H which was already drilled, Chesapeake anticipates further development will include three more wells with laterals running from the south to the north.

Chesapeake estimates that 13.230 Bcf in recoverable reserves underlie the Ramey Unit based on the leased acreage in its 196.51 acre pooled unit. Chesapeake relied on uniform field characteristics in calculating the total recoverable reserves. Based on these characteristics, 7.10 Bcf underlie the southernmost 105.48 acres in the Ramey Unit and 6.13 Bcf underlie the 91.03 acres pooled in from the residential neighborhood which was added to the unit in the current permit application.

The southernmost 105.48 acres consists of two tracts where wells can be drilled without obtaining an exception to Statewide Rule 37. Chesapeake estimates that the expected recovery for horizontal wells on the Ramey Unit is 934 mcf/ft of effective drainhole. Chesapeake estimates that four wells drilled on the southernmost acreage with a north-south orientation will recover 5.56 Bcf of natural gas. Chesapeake did not provide an estimate for drilling the same wells with an east-west lateral configuration. The southern portion of the unit is 2500 feet in width.

Chesapeake testified that it is difficult to identify surface locations in the City of Fort Worth. The subdivision is located within the boundaries of the City of Fort Worth. City approval is required for all proposed surface locations and cannot be obtained until the Commission issues a drilling permit. This leads some operators to permit "short laterals" in order to start the permit process with the City.

Chesapeake also claimed that it would not be economic to drill wells with shorter laterals. Chesapeake claimed that a well must have a lateral between 1500 and 1600 feet in length before it is economic to drill assuming natural gas prices of \$8 per mcf. Chesapeake asserts that wells would not be drilled to recover the natural gas unless they are economic.

If the Ramey 1H is granted an exception to Statewide Rule 37 for its complete length, the estimated ultimate recovery from the well is 3.317 Bcf. If the well is plugged back to the portion of the wellbore that does not require an exception to Statewide Rule 37, the estimated ultimate recovery is 1.533 Bcf. Chesapeake claims that the difference of 1.784 Bcf would never be recovered due to the lack of surface locations and the minimum lateral length necessary for an economic well.

Finally, Chesapeake acknowledges that it drilled the lateral to its full length without the appropriate permit. It claimed it was required to commence drilling operations in order to maintain its lease rights. It characterized the drilling of the lateral to its current length without a valid permit as a business decision, but urges that it should not be denied an exception permit on that basis. Chesapeake understood that if the exception permit was denied, it would be able to plug back the well to a legal location.

## PROTESTANTS POSITION AND EVIDENCE

Protestants claim Chesapeake has not attempted in good faith to lease their mineral interests. Several individuals have never been contacted by Chesapeake. There are also allegations that Chesapeake only contacted the most vocal individuals to appease them, and did not treat all members of the neighborhood equally. Several protestants argue that granting Chesapeake the requested exception will result in "forced pooling" of their mineral interests. Concerns were also raised with respect to whether the surface location was within a flood plain. Protestants also urge the application should be denied because Chesapeake violated the law in drilling the lateral to its full length without a valid permit. Denying the application would teach Chesapeake that it is expected to comply with the state's administrative procedures and cannot ignore them as a "business decision".

## **EXAMINERS OPINION**

Chesapeake urges that an exception to the 330 foot lease line spacing requirement in the Newark, East (Barnett Shale) Field is necessary to prevent confiscation.<sup>3</sup> Chesapeake's claims that the only feasible economic means to allow for production from the leased mineral interest owners in its Ramey Unit is through an exception permit allowing it to perforate and produce the lateral it has already drilled. Chesapeake argues that without an exception the leased mineral interest owners will be denied a reasonable opportunity to recover their fair share of reserves.

The examiners recommend Chesapeake's application be denied. Chesapeake failed to establish that a well at the exception location was necessary to provide it with a reasonable *opportunity* to recover its fair share of reserves. Regular locations exist on the unit which will recover a significant amount of reserves in the Newark, East (Barnett Shale) Field. Additionally, Chesapeake's voluntary creation of a pooled unit in the residential subdivision cannot be used as a basis for obtaining an exception to Statewide Rule 37 on the basis of confiscation.

## Exceptions to Prevent Confiscation

To establish entitlement to an exception to Rule 37 to prevent confiscation, an applicant must show that absent the applied-for well, it will be denied a reasonable opportunity to recover its fair share of hydrocarbons currently in place under the lease, or its equivalent in kind. The applicant must satisfy a two pronged test: 1) the applicant must show that it will not be afforded a reasonable opportunity to recover its fair share of hydrocarbons currently in place by drilling a well at a regular location; and 2) the applicant must show that the proposed irregular location is reasonable.

<sup>&</sup>lt;sup>3</sup>Chesapeake did argue that gas would never be recovered from underneath the northern 91.05 acres in the residential subdivision unless it is granted an exception permit. Chesapeake presented no evidence that an unusual geologic condition existed which requires the well at the exception location in order to prevent the waste of a substantial volume of hydrocarbons which would not be otherwise recovered by existing wells or wells which could be drilled at regular locations. Accordingly, Chesapeake's application cannot be approved on the basis that it is necessary to prevent waste.

It is the basic right of every landowner or lessee to a fair and reasonable chance to recover the oil and gas under his property as recognized by the Texas Supreme Court in *Gulf Land Co. v. Atlantic Refining Co.*, 131 S.W.2d 73, 80 (Tex. 1939). Denial of that fair chance is confiscation within the meaning of Rule 37. *Id.* Because an application cannot seek redress for past drainage, an applicant must provide evidence that it will not be afforded an opportunity to recover the reserves currently in place under its lease - this is its "fair share".

# Chesapeake Failed to Establish the Necessity for an Exception

Chesapeake failed to establish that it is entitled to a well at the proposed location to prevent confiscation for its Ramey Unit. Chesapeake's own evidence illustrated that regular locations exist on the Ramey Unit. Chesapeake acknowledged the presence of other regular locations on the Ramey Unit, but claimed that drilling the wells would not be economic.

Exceptions to Rule 37 are not granted to eliminate risk for an operator or to provide it with the best possible well. An exception to Rule 37 to prevent confiscation is granted to provide a reasonable opportunity to recover the oil and gas reserves on an operator's lease which cannot be recovered from a regular location. Chesapeake's map of the Newark, East (Barnett Shale) Field depicts regular locations within the confines of the reservoir. Chesapeake was required to produce evidence to rule out any regular locations in order to justify its application for a Rule 37 exception.

The examiners note that with respect to the existence of regular locations, Chesapeake's maps depicting the northernmost 91.03 acres of the Ramey Unit include locations where a vertical well could be drilled without requiring an exception under Statewide Rule 37. Additionally, there are several locations where vertical wells, or horizontal wells with short laterals could be drilled which would require a Rule 37 exception which would be administratively approved under Rule 37(h)(2)(b) as Chesapeake operates the offsetting acreage.

Furthermore, Chesapeake's maps show that the southernmost 105.48 acres consists of two tracts where wells could be drilled without obtaining an exception to Statewide Rule 37. Chesapeake estimates that four wells drilled on the southernmost acreage with a north-south orientation will recover 5.56 Bcf of natural gas. However, Chesapeake did not provide an estimate for drilling wells with an east-west lateral configuration. Chesapeake's maps of the unit show that the southern portion of the unit is 2500 feet in width. This would permit the drilling of wells with east-west laterals in excess of the minimum length Chesapeake contends is economic.

Chesapeake's witnesses claim they need the applied-for irregular location to allow them to have a commercial well. However, neither Chesapeake nor any other operator is guaranteed a well that meets its self-imposed criteria for economic viability - each mineral interest owner is entitled to a fair and equal opportunity to recover its fair share of the hydrocarbons under its tract. Economic requirements: 1) vary from company to company (applicant to applicant); 2) are not evenly applied; 3) are not specific to the property rights on a given tract; and, 4) are subject to unpredictable external

market fluctuations in the price of oil and natural gas. An operator's economic requirements therefore cannot be the basis for granting an exception to Statewide Rule 37 to protect correlative rights. See Rule 37 Case No. 0206334: Application of Enron Oil & Gas Company for an exception to Statewide Rule 37 to Drill Its No. 17 Well, Frank Reed 117 Lease, Sawyer (Canyon) Field, Sutton County, Texas, and Rule 37 Case No. 0245869: Application of Chesapeake Operating, Inc. for an Exception to Statewide Rule 37 to Drill Well No. 4 on the Green Gas Unit Lease, Oak Hill (Cotton Valley) Fields, Gregg County, Texas (Final Order entered January 15, 2009).

Chesapeake's numerous permitting applications for this well and its decision to ignore Commission rules when it drilled the well to its full length provide an illustration of why economic viability is not reliable evidence to support an exception to prevent confiscation. The first three amendments filed by Chesapeake to permit this well all confined the lateral to the southernmost 105.48 acres. Chesapeake's own experts admit that the Ramey 1H well with the permitted lateral of 1636 feet would be economic under the models they presented at the hearing. Chesapeake's experts also testified that it was a "business decision" to drill the well to its full length without first obtaining the required exception permit because some of its lease rights were due to expire. In light of such a business decision, Chesapeake's self-determining economic guidelines are clearly not sufficient evidence to support the requested exception.

### **CONCLUSION**

Chesapeake failed to establish that is entitled to an exception to Rule 37 to prevent confiscation of natural gas underlying the Ramey Unit in the Newark, East (Barnett Shale) Field. Accordingly, the application for a lease line spacing exception to should be denied. Because this well has already been drilled with a lateral which falls within the lease line spacing requirements, the Final Order should include provisions requiring Chesapeake to set a retrievable bridge plug in the wellbore 330 feet from the first unleased window tract in its Ramey Unit. The examiners recommend installation of a retrievable bridge plug as Chesapeake is continuing its efforts to lease minerals within the Ramey Unit. The examiners also recommend that the plug back operations be witnessed by the Commission's District Office.

Based on the record in this Docket, the examiners recommend adoption of the following Findings of Fact and Conclusions of Law.

## FINDINGS OF FACT

1. Chesapeake Operating, Inc. ("Applicant" or "Chesapeake") seeks an exception to Statewide Rule 37 for Well No. 1H on the Ramey Unit, Newark, East (Barnett Shale) Field, in Tarrant County. The well has already been drilled. Chesapeake appeared at the hearing and presented evidence in support of its application.

- 2. The application is protested by Lynette Reid, Johnny Lee Nelson, Jr., Suu Lo, John Hogan, Cynthia Williams, the 7728 Bermejo Trust, Sheron Nwachukwu, and Freddie Lee Carrol ("Protestants") who own tracts within 330 feet of the as-drilled lateral for the Ramey 1H. Protestants appeared through authorized representatives at the hearing.
- 3. The Ramey Unit is an irregularly shaped 196.51 acre pooled unit composed of 291 tracts ranging from 75.48 acres to .14 acres. The southernmost 105.48 acres consists of two tracts where wells can be drilled without obtaining an exception to Statewide Rule 37. The northernmost 91.03 acres of the Ramey Unit include 289 tracts in a residential subdivision within the Fort Worth city limits.
- 4. The Newark, East (Barnett Shale) Field is subject to a spacing requirement of 330 feet minimum distance from the drainhole of the lateral to the nearest lease line.
- 5. The Ramey 1H was originally permitted as the Green Oaks Well No. 2H by Chesapeake's predecessor, Dale Operating Company. The well was permitted on a 81.7 acre non-pooled unit with a 1661 foot lateral in a general east-west orientation. The permit was issued on June 22, 2006.
- 6. On March 21, 2007, Chesapeake filed an application for an amended permit. The well was redesignated as the Ramey 1H at that time. Chesapeake identified a two tract 105.2 acre unit which required an exception to Statewide Rule 37 due to the wellbore's proximity to another unit operated by Chesapeake. The surface location for the well remained the same, but the lateral was changed to run 1839 feet in a north-south orientation. The application was administratively approved on March 28, 2007.
- 7. Chesapeake filed a second amended permit application for the Ramey 1H on October 24, 2007 to reflect a slight change in the surface location for the well. The second amended permit application was administratively approved on October 31, 2007.
- 8. Chesapeake filed a third amended permit application on November 28, 2007 to amend the location of the uppermost perforation point, and further amend the surface location. This permit application was administratively approved on December 7, 2007.
- 9. On March 26, 2008, Chesapeake spudded the Ramey 1H well. Surface casing was set on March 27, 2008. Commission records show that drilling operations were completed by April 14, 2008. The well has not been perforated. The lateral was drilled to a total length of 3553 feet instead of the permitted length of 1839 feet. This extended the lateral underneath the residential subdivision.

- 10. On March 27, 2008, Chesapeake filed its fourth amended permit application. The primary purpose of this amendment was to extend the lateral to 3553 feet. Commission records indicate that lateral was drilled to the requested length prior to the expiration of the 21 day time period for affected persons to file protests in response to the Commission issued Notice of Application.
- 11. The as-drilled lateral for the Ramey 1H currently comes within 330 feet of 15 "window tracts" which are not included within the proposed pooled unit. The closest tract is 41 feet from the wellbore. Three other tracts are within 100 feet from the wellbore.
- 12. Regular locations exist on the Ramey Unit in the Newark, East (Barnett Shale) Field.
- 13. Chesapeake did not establish that a well or wells at regular locations on the Ramey Unit would not afford it a reasonable opportunity to recover the reserves currently underlying the unit in the Newark, East (Barnett Shale) Field.

## **CONCLUSIONS OF LAW**

- 1. Proper notice of hearing was timely given to all persons legally entitled to notice.
- 2. All things have occurred to give the Commission jurisdiction to decide this matter.
- 3. Chesapeake did not have a valid permit for the as-drilled lateral for the Ramey 1H well.
- 4. Applicant failed to establish that an exception to Statewide Rule 37 for a well at the applied for location is necessary to prevent confiscation or waste.

#### RECOMMENDATION

The examiners recommend that Chesapeake's application be denied in accordance with the attached final order. The examiners further recommend Chesapeake be ordered to set a retrievable bridge plug in the lateral 330 feet from the nearest unleased window tract in the Ramey Unit.

Respectfully submitted.

Mark J. Helmueller

Hearings Examiner

Jours Chardler

Donna Chandler

Technical Examiner